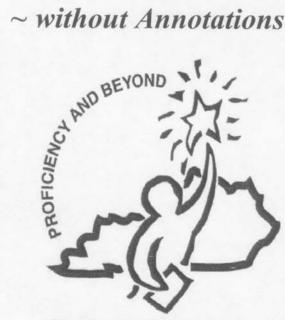
Kentucky Marker Papers

Primary – Grade 12

~ without Annotations ~



Kentucky Department of Education

Winter 2002, reprint

Gene Wilhoit, Commissioner **Kentucky Department of Education**

ARTICLES

Head Lice How to Detect and Treat



Do we want a happier, healthier school year? Well, if every parent will take time to check their children for head lice at home before coming to school, we might never have the problem.

Students, head lice has affected our school, and has caused an increase in absenteeism. It can spread throughout the entire school even if one child arrives with lice.

Parents, if your child has come home with head lice, don't panic, because millions of school children catch lice each year.

Describing the Louse

A louse looks like a bug which is very small. It's color is often light brown but can vary, because it can change to match the child's hair color. When checking to see if your children have lice by parting the hair, a louse may move very quickly, and shy away from the light making it difficult to catch.

Since a louse moves quickly parents need to look for the eggs called nits. That's what it lays and near the back hair line, behind the ears, and on top of the head are good places to look. The color of nits usually are yellowish-white with oval specks attached to the hair near the scalp.

When to Look for Lice

If your child scratches their head often, then it's time to check for lice. Itching occurs when lice bite and suck blood from the scalp and is a primary sign of having lice. Red bite marks or scratches maybe spotted on the head.

How to Inspect

Parents, you should check your children's heads every week.



 Carefully examine hair and scalps of all family members for lice and their eggs. Look for nits firmly attached to hair close to the scalp. The eggs are much easier to see and detect than lice.





Actual Nit

Pseudo-nit

How to Treat

When a family member is treated, all should be inspected. Individual treatment is a two-step process involving the use of a louse shampoo, and then a nit comb is to be used to comb out the eggs.



 Once head lice and/or nits are found, your doctor may prescribe a medicine called a pediculicude. If your doctor prescribes a creme rinse, follow the instructions on bottle label. One application is enough for the cream rinse, but some shampoos may need to be used more than once.

May be removed with a special nit comb. Our school has a "no nit" policy which means no one can come to school until the nits are gone.

How to Clean the House

If your child is found to have lice, wash their clothes, sheets, quilts, and vacuum the floor.

 Lice are easily spread from one person to another. Make sure infected individuals with head lice do not share articles (combs, brushes, towels, hats, scarves, pillows, etc.)



 Use hot water to wash clothes, towels, and bed linens. Soak combs and brushes in hot water for 10 minutes.
 Dry-clean hats and clothing that cannot be washed (or seal in a plastic bag for at least two weeks).



 Vacuum carpets, upholstery, pillows, and mattresses which may have been exposed to persons with head lice. Lice at our school has recently become a problem. Too many students throw their coats down on the floor in the cafeteria to eat breakfast. They leave their book bags lying and hanging around anywhere. These are bad habits that leave you at risk for catching lice. Be aware and let's get rid of this pesky situation.^{1,2}

¹Parent letter from Floyd County Board of Education about lice.

²About Head Lice, 1998 Channing L. Bete Co., Inc.

GRADE 6 - ARTICLE

THE HONOR ROLL

Hey, 5th graders! I know you all are really excited to go into the sixth grade. I also know that just about all of you what to be on the school's honor roll. Well, you're in luck. I know what the criteria to be an honor student is, and I'm going to share my wisdom with you.

Well, the first criteria needed to be an honor student is maintaining a 3.0 grade point average. Now, this may seem sound hard, but it isn't once you think about it. You see, a 3.0 GPA is getting B's and A's at your old school. However, at this means getting the grades of 3's and 4's. To you, these grades are like B's and A-'s.

The reason we have you maintain a 3.0 GPA is mainly to show yourself and your parents how well you are doing in school. After all, your parents do like knowing that you've gotten good and descent grades. I also know that you like knowing that your grades are good and descent.

Another criteria, needed to be an honor student is to have no suspensions for the whole year. Most people, think that this is one of the easy criteria of an honor student. Although, it could be the hardest criteria if you like to pick fights. Some other problems that may suspend you include: talking back to your teacher in a harsh manner, using profanity against a teacher or staff member, and even distributing violence in school. However, one main possible suspension is destroying school property.

In the long run, having no suspensions can help you be trusted by your parents. One main way that having no suspensions will help you in this, is that it shows your parents how mature you can be. Having no suspensions can even help show how responsible, respectful, and trustful you are at school and around your parents.

Now I am sure that you like to meet and make new friends, we all do! However, most of us are either to shy or scared to talk and meet new friends. Here at Middle School, we have

solved your problem. We have organized tons of different and fun clubs for you to choose from. This helps you meet and make new friends at school and at the same time, you're getting another criteria finished to be on the school's honor roll.

The clubs we have organized for you at ...M.S. include the following: Forensics, STLP, Y Club, Girls and Boys Basketball, Cheerleading, Science and Math Club, Academic Team, Respect Society, and Magic Me. All you have to do, is choose at least one of these clubs to be in. Then, you complete the other criteria to be an honor student and you are on the honor roll!!

Now, for the fourth criteria needed to be on the Middle School honor roll. This is having no more than one A.S.D. during the year. Now I know that your probably thinking to your self, "What's A.S.D.?" Well, I know the answer to this question, it's After School Detention.

Do you like staying quiet and not being able to move for two hours? I know I don't. If you don't that's good, because not having more than one A.S.D. will prove that you are a well-behaved student. After all, do you think that you should be let into 7th grade if you aren't well-behaved? Hmmmm?

Some other things that not having more than one A.S.D. does for you include respect. That's right, respect, that thing that we are supposed to give our family, parents, and teachers. Having no more than I A.S.D. shows how well you respect your school's teachers and staff. Having no more than one A.S.D. also shows how respectful you are to peers.

Now we have come to the final criteria needed to be on the honor roll!! What is it, you ask? The last criteria is having no more than *one* unexcused absence. I know this might be a little hard since we all love to miss our classes and get out of school.

I have on thing to tell you about your love of getting out of school and classes. You better have excuses for them! The one main reason for this criteria of the honor roll is to show how respectful you are of your school, school's staff, and your teachers.

By having excuses for you absences, you show your teachers and parents how well you take care of yourself. I know that you like showing your parents how trustworthy and responsible you are. That's right, the times when you like to show how grown up and mature you can act.

That's all of the honor roll criteria needed at School. You see, it can be very simple once you know what the criteria is. The criteria is: have no more than one unexcused absence, have no more than one A.S.D. (After School Detention), participate in one extra-curricular activity, have no suspensions for the year, and maintain a 3.0 Grade Point Average. That's the entire criteria to be an honor student on the M.S. honor roll. BYE!! I'll see you next year on the Middle School honor roll.

GAME REVIEW

'Magic: the Gathering' is a game of 1,200 cards

Imagine yourself as a wizard fighting on a plain in a battle for your life. And your opponent throws a lightning bolt at you. What do you do? I know what I would do. I'd send my dragon at them.

This is the setting in the world's hottest selling Collectable Card Game (CCG) on the market. Magic: the Gathering is a trading card game produced by Wizards of the coast since 1993. The game combines the collectibility of traditional sports cards with a game rich in strategy, problem solving, and imagination (plus none of that stale pink gum in the card packs). No board, no joystick—just you and a friend locked in an intellectual battle.

Sold in 15-card "booster packs" and 60-card "starter decks" Magic is played by two or more players, and an average game takes about 20 minutes. The cards themselves are illustrated by top fantasy and science fiction artists, and the art helps detail the dimensions of Dominia (the game's setting).

Each player represents a powerful wizard battling for

control of a magical plane of existence. Players construct their individual decks from a library of over 1,200 cards, creating a unique play environment. It's a different game every time you play. And with 1,200 cards it's almost impossible to have the same deck as your opponent.

Magic is based on the FIVE colors of magic, Blue, Green, Red, Black, and White. Each color has its own special abilities.

Blue magic draws power from islands for energy. Blue Magic is mental in nature. Its powers are illusion and deception, as well as the elementals of water and air.

Green magic draws energy from the forest. Many magicians have been lulled into complacency by Green magic's peaceful exterior, the magic of life, and have been caught unaware by the vast destructive capability of its nature.

Red magic is a destructive magic, the magic of earth and fire. It draws its energy from mountains. Red is also the magic of chaos and war.

Black magic stems it's powers from swamps, it is the magic of death and plague.

Last but definitely not least is white magic, which draws its energy from the plains. It is the magic of healing and protection. Though known for healing, it is far from unfamiliar to war.

If you want more information on "Magic: the Gathering" go to Ms. room (last room on the left on the 8th grade floor) and leave me a note or E-mail me (see humor column).

Also there is a Magic club forming at for those interested. Remember, it's just a game but have fun.

A JOURNEY TO MAYSVILLE

A three-day weekend is approaching and it is time for a quick family getaway. You could make your way to a large city loaded with confusion and short-tempered people. Or you could choose to head towards Kentucky's most interesting town that will satisfy anyone from a grandpa, to a teenager, to a working mom. The one and only Maysville is a town overflowing with friendly people, amazing historical sites, breath taking architecture, beautiful scenery and delicious home-cooked food that will leave you with a smile. So pack your bags and take a journey to Maysville, Kentucky that you will never forget.

With the population increasing as time progresses, Maysville is a growing community located in Mason County. The population of Mason County itself is also predicted to increase over time. In 1990, the population was 16,666. By the year 2000, 17,991 people are predicted to reside in Mason County. This shows that Maysville not only attracts tourists but it attracts residents as well due to its friendly, welcoming atmosphere. Even the job situation is stable since only 1,346 people commute out of the county to work while 3,023 people commute to Mason County to work and the poverty rate has decreased between 1989 and 1993.

Maysville has continued to grow since its establishment in 1787. When

the town was first founded, it wasn't referred to as Maysville though. At first it was named Limestone due to its limestone riverbanks. When Kentucky was granted state-hood in 1792, Limestone became known as Maysville. In 1830, a four-mile path used by animals as they traveled from the Ohio River to the salt licks at Blue Licks was established. This path, Buffalo Trace, was then beginning to be used by people which led to more settlers residing in this area. Now Buffalo Trace is known as U.S. Highway 68.

Finding your way to Maysville for your quick family getaway will be a breeze since U.S. Highways 62 and 68, four-lane AA Highway and Kentucky Routes 10 and 11 run through Mason County. If you plan on flying, the Cincinnati-Northern Kentucky Airport is located only 71 miles away.

When you first arrive in Maysville with your family, you will notice that there are an abundance of places to visit. A great place to stop by is the Mason County Museum located on Sutton Street. This museum was built in 1878 as Maysville's first library and is listed on the National Register of Historic Places. Here you can follow the story of Simon Kenton who is nicknamed the father of Mason County. Also study historical and genealogical records. Don't forget to stroll through the art gallery and view videos and artifacts that will let you glance into Maysville's early pioneer days.

Located beside Mason County Museum is the public library. Be sure to view this magnificently constructed building. Directly behind the library is believed to be the county's first graveyard. This graveyard holds the tombstones of Jacob Boone, first trustee of Maysville, Charles Erb Wolfe, first Mayor, and Peter Grant, uncle of President Ulysses S. Grant.

Don't forget to visit the National Underground Railroad Museum. Here you can learn about how the Maysville area helped move participates of the Underground Railroad out of bondage and into freedom. Then stop by Phillips Folly in downtown Maysville. Phillips Folly was one of the stations on the Underground Railroad. Legend has it that this building was started in 1825 by William B. Folly who ran out of money and then finished the house after winning at gambling in 1828. Phillips Folly is located on the National Register of Historic Places.

If you enjoy great scenery, Limestone Landing is the place for you. Founded in 1992, Limestone Landing represents the return of steamboat activity. Relax while listening to the Delta Queen and the Mississippi Queen as they make their frequent stops along the Ohio. In a fountain nearby, a large rock resides with the initials D.B. carved in it. Daniel Boone is said to have made the carving.

Another point of interest is Rosemary Clooney's childhood home. Visit the red brick home where this famous singing star lived. The street was named after her when her first motion picture premiered.

Only four miles south of Maysville is Old Washington, Kentucky. If you have extra time on your hands, travel to this quaint town and stop by Marshall Key House. It was here Harriet Beecher visited in 1833 and got the idea for her famous book <u>Uncle Tom's Cabin</u>. Also stop by the Paxton Inn which was another station on the Underground Railroad.

While in Mason County, view two of the thirteen covered bridges left in Kentucky. These carefully yet magnificently wood covered bridges include Dover Covered Bridge and Valley Pike Covered Bridge.

The three-day weekend ends quickly and it is now time to return home. The car is packed, the children buckle their seat belts and the gas petal is pushed. You have had and wonderful getaway and look forward to the next three-day weekend when your family can return to Maysville for yet another exciting but relaxing visit.

About the Author:

was born in Glasgow, Kentucky in 1984. In her spare time, she enjoys reading and playing basketball and tennis. She currently attends Glasgow High School as a 9th grade student and would like to be a pediatrician when she grows up.

Where are the Fans?

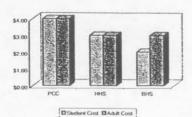
The game is tied 50 to 50; the home team has the ball with three seconds on the clock. The cheerleaders stand on the sidelines chanting their school's name. The reserves stand motionless. The ball is thrown into the center; the player turns around, shoots . . . HE SCORES! The home team wins the game. But wait, where's the excitement? Where's the school spirit? Where's the celebrating? While victories are happening on the court, where are the fans?

School Spirit

It used to be that going to the high school basketball game was the thing to do. You could barely find a seat to sit in because the gyms were so jammed packed. Not anymore though. Even during this year's WYMT tournament, the district tournament, and regional tournament, there were plenty of seats that were empty. Most nights of these games involved four schools and yet the bleachers weren't completely filled. At the regular season games, you just about had whole sections of bleachers to yourself. It's not that the school spirit has died out. It's because of the outrageous cost of attending a ballgame. If you attended the four games of the WYMT Mountain Classic, you paid \$20.00 to get in. This is just the cost of the admission for one - not a family. Donald "Happy" Mobelini, principal of Hazard High School, says it's because there are too many games a week and parents, students, and fans can't afford it.

Empty Wallet

In the past couple of years, the cost of tickets to get into high school basketball games has shot up in Perry County. Below shows the admission cost for a regular season game for each high school in the county.



Fans these days have a hard time coming up with three and four dollars for four ballgames (including both boys' and girls' teams) a week. Of course, the chart doesn't include the cost to get into classics or tournament games. According to Patty Grigsby who is the financial clerk at PCC, these games are five dollars to get in. A family of four would have to pay \$20.00 for admission for one game. This isn't including concession stand money spent. What are these parents suppose to do?

Parents Too

Let's think about the parents of these athletes and the sacrifices they make so the high school even has a team. First, they buy the accessories (shoes, warm-ups, socks, and anything else required) their child needs to participate. Fund raising is offered but who does that? The parents do. They spend tons of cash on gas all season getting their child to and from practices and games. And yet they have to pay the same admission as everyone else. They don't just walk into the games for free. Parents are out quite a bit of money each week because of wanting to go and support their child in the activity he/she enjoys doing. For some families, this becomes a financial burden. Especially when parents have other children besides the one on the court. I know that my parents (I do not have any siblings) spend at least \$16.00 a week just to come and watch me cheer. Going to every game this year, my parents have spent a total of \$222.00 just on admission. That's pretty expensive.

Where do the \$'s go?

People have grumbled and griped about the gate cost but there is one consolation. According to each school, the money isn't being wasted. Perry County Central High School, Buckhorn High School, and Hazard Independent High School give the money taken up at the gate to that particular sport the crowd comes to support. This money helps pay for gas and bus drivers for away games, out-of-state expenses for teams when scheduled, new uniforms, equipment, gym clean up and other expenses the teams have throughout the year. Still these schools and groups would probably receive more for their accounts if they would lower the price to get in so more fans would come. Those extra fans would make up for the few dollars knocked off of the gate price.

Gym Capacity

In years past, the problem of fans not attending a game was because of seating availability. Not in recent years, though, because of newer and remodeled facilities, there is plenty of room for the students, parents, and other supporters. Below shows the seating capacity of the high school gyms in Perry County.

SCHOOL	COMPACITY	ENROLLMENT 1013		
PCC	4000			
HHS	3500	330		
BHS	500	(k-12) 550		

Not one of these gyms fills up for a game on a given night, not even at a rivalry game. Norma (financial clerk at Buckhorn High) says the average attendance of ballgames at regular season games is around 66 to 100 people and for a rivalry game about 200 fans will come to support the team. Not a lot, right? How do you suppose the athletes feel at Buckhorn High School when they come to play their hearts out and all they see in the fans are basically their family members?

Where Are The Students?

The gyms will probably never look like they did in the 70's and 80's, though. Student enrollment is one factor. It isn't as high as it once was because of the fact people don't have as large families as they use to. Take Perry Central for example. When the school opened in 1995, they were classified as a 4A school. Since then, because of the drop in student enrollment, they are now considered a 3A school. But there are still quite a few students in our school systems. Perry Central's enrollment is 1,013 (which the above chart shows). Out of this number, there are a total of 76 athletes on the court. This includes boys' and girls' basketball teams and boys' and girls' varsity cheerleaders. But Mrs. Grigsby says there is an average attendance of only between 200 and 300 people that attend a game regularly - the majority being the family of the athletes - about 150 fans. Take that from 200 and all that show up to watch the team are about 50 (or a little more) supporters that have no family connections with the athletes.

How Can We Help?

Now that we know the single factor of why no more fans show up to support these athletes than do, we need to "fix" the problem. We need to make the admission cost more reasonable and affordable for people. Below are a few suggestions that could help resolve the problem:

- * Let students pay \$2.00 while adults pay \$3.00 for admission for all games,
- * Offer parents five tickets for five dollars to use at any game during the season,
- * Offer selling a \$30.00 pass that gets fans in for regular season games (not classics or tournaments),
- * Or offer selling a \$40.00 season pass, which can be used to get into all athletic events (not just basketball, but football, soccer, baseball, softball, volleyball).

These may not sound like much, but if you multiply them times the family members, it's a lot of money for the schools. For example, if a family of four buys the \$40.00 passes, that would be three passes for \$40.00 each (excluding the athlete). That would be a total of \$120.00. Even if only one parent each for the 76 athletes at Perry County Central bought a \$40.00 pass, that would add up to \$3,040.00, and PCC would still make money at the gate for those who don't have passes. Another suggestion to help get fans to the games would be each school could offer promotions. These also would help ease the cost of admissions for the fans.

- * Have more student appreciation games when students are given a free pass for one regular scheduled home game,
- * Have parent appreciation games that would work the same way,
- * Have games where free tickets to future games or an upcoming tournament are given away.
- Or have games where proceeds are given to a certain group for a specific cause - not just the basketball accounts.

And there are many other ways to get people to these gyms to support our athletes. The school systems could even ask parents and students for ideas.

And wouldn't that be exciting for the athletes to

see these gyms in Perry County filled to capacity for "just" a regular game!

The Final Score!

The game is tied 50 to 50; the home team has the ball with three seconds remaining. The cheerleaders stand on the sidelines chanting their school's name. The fans cheer with them. The reserves stand motionless. The ball is thrown into the center; the player turns around; he shoots ... HE SCORES! The crowd goes wild!!!

A Lifetime of Music

 \hat{W} hat would you say if I told you that there was a very simple way to significantly increase your IQ and reduce your stress level? Or, what if I told you that you could shorten that dreaded hospital visit that you have coming up? What if I told you that you could, at the same time, improve your K.I.R.I.S. test scores by an average of 36%? What if I told you that you could heighten your SAT College Entrance Exam scores too? "How?" would probably be your first question. The answer is a simple five letter word...MUSIC! No, you're not dreaming.

Benefits for Children
A study conducted by
Frances Rauscher, a
psychology professor at
the University of
Wisconsin-Oshkosh,
showed that children
taking music lessons had
a great increase in their
capabilities of working
with others, memorizing, understanding
spatial concepts and
dealing with time.

Experts believe that the positive effects toward time are due to the fact that, in order to play music, you must count rhythms, tempo, and keep track of timing. In both music and math you must be able to look ahead. "Playing the piano, for instance, requires you to be able to look ahead-you have to plan your finger patterns based on where you think you're going," says Rauscher. Music also teaches discipline to children in a very unique and fun way.

> Music is a musthave skill that will last a lifetime!!

In a preliminary study, singing lessons were given to five three-year-olds from an inner-city day-care center. Five other kids, age three, got 15 minutes of piano lessons per week. After six months of music all of the children showed significant improvement in their ability to put together pieces of a puzzle within a given time limit. This same type of reasoning of

how things fit together is used by engineers, chess players and highlevel mathematicians.

Initially, the kids in the study were below the national average; but after music training, scores nearly doubled. Keyboardists also saw their scores rise significantly.





Exercising these brain patterns early in life is predicted to have an everlasting impact upon your abstract reasoning skills.

Benefits for High School Students

For years people have speculated on the benefits of music and the arts, but it wasn't until just recently that scientific evidence turned their predictions into concrete evidence.

Locally, Steven Moore (then the Director of Bands at Lafayette High School) decided to conduct a study of his own to prove the correlation between music and the brain. His study was conducted on Lafayette High School's Senior K.I.R.I.S. test scores for the school year of 1993-1994. Moore monitored test scores of those enrolled in Orchestra or Band classes comparatively to those who were not. His findings were, indeed, very interesting. Moore found that fifty-three of those enrolled in these classes scored an impressive 36% higher on the highly esteemed state tests in the subjects of Social studies, Science, Reading and Math than 251 other seniors that hadn't taken the classes. Pretty impressive, right?

The effects of music aren't limited to our local region either. Nationally, in 1995 The College Board found that students who had taken acting, art, dance, music, photography or studio art scored significantly higher than the average for all students on the verbal and math sections of the SAT College Entrance Exam. They scored exceedingly far above those who hadn't taken any of the arts related courses.

The study by The College Board also found that the longer the students had taken the courses, the more significant the benefits.

Recent studies have shown that participating in extra-curricular or co-curricular activities has a greater impact upon college entry than GPA, class rank or test scores!!

Benefits for Older People

Music may hold benefits for older people as well. Abstract reasoning IQ tests of 36 college students were about nine points higher when preceded by 10 minutes of

listening to Mozart than they were when the same students listened to a 10 minute relaxation tape or sat in silence before the exam.





Health Benefits Previous research has linked stress to the perception of pain. Participants in a recent study were asked to rate their anxiety levels twice daily, beginning 3 days prior to surgery using a scale of 0 to 100. All clustered around 80 prior to the random distribution of musical tapes. By surgery time the listeners had averaged a 40 point drop in anxiety, while nonlisteners had stressed up about 5 points.



After the surgery the conductors continued their study. Listeners consistently reported only half the post-op anxiety and pain of

the other patients—and used half as much pain killer!!

The reduced use of medication actually boosted their recovery time, allowing the patients to be released from the hospital a day earlier, virtually anxiety-free, while the others continued to average a surprisingly high score of 50 at discharge.

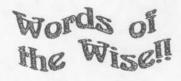


My Concluding Remarks

In conclusion, I
would like to reiterate
the fact that throughout
every study, I found that
similar benefits were
found. Those involved
in music were better
skilled in math, speech
and social skills. I feel
that this sort of information should be accessed and researched
by everyone, especially
parents.

So, the next time you hear someone say that music is merely a time filler or that band is a "geek" organization, you can gently correct them. There is a whole lot more to music than what

meets the eye...and the benefits last a lifetime!!





* Wherever there is good music there is harmony, Wherever there is harmony there are good citizens.

Moore

* Music is the first, the simplest, the most effective of all instruments of moral instruction.

Ruskin

* Noble and manly music invigorates the spirit, strengthens man and incites him to great and worthy deeds.

Homer

* Since music has so much to do with the molding of character, it is necessary that we teach it to our children. Aristotle * Children should learn to play some musical instrument, not merely listen forever to "canned music" or music through the air. A child should be taught to do it himself, with his own hands. Teachers and parents should realize that to use the hands trains the brain.

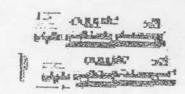
Arthur Brisbane (New York America)



Generic Drugs vs. Brand-name Drugs







Motrin, Tylenol, and Equate have the same ingredients and the same strength. But there is a very important difference in price between the generic drug and the brand-name drug.

By

here is quite battle occurring in the states over patient choice and access to generic pharmaceuticals. If this fight is lost, patients, consumers, and taxpayers can expect to pay more for their prescription drugs.

Generic pharmaceuticals saved consumers \$8 - \$10 billion in 1994, and that figure represents only drugs sold directly through pharmacies. These savings of health care dollars enable insurance companies, managed care companies, and patients to acquire other needed health services more easily. But there is a great danger that those savings could be lost if patients, doctors, pharmacists, and other health care providers do not join together to stop the manipulation of state and federal laws that are raising hurdles to obtaining safe but economical generic drugs. For example, some brand-name companies spent

millions of dollars during 1997 and 1998, battling over a special category of drugs in state. While a brand-name company claims safety reasons and a desire to protect patient health as the reason for all of its activities, a closer look reveals another motive. Either the brand-name is facing stiff competition for the first time, or the drug has just gone off patent. What really is going on is a fight to protect the company's monopoly. By this year, brand products with current annual sales of more than \$12 billion will lose patent protection and be vulnerable to generic competition.

Food and Drug Administration's Role

According to the Food and Drug Administration (FDA), a generic drug is a version of a pharmaceutical that is equivalent to the pioneer or brand-name

drug. Generic drugs are usually sold under the chemical name and drug. Brand-name drug companies invest hundreds of millions of dollars to research and develop a new drug. But once the drug goes "off-patent" other manufacturers may reproduce and market the generic alternative. The FDA requires the generic version to be bioequivalent. This means the generic drug must have the same active ingredients, be identical in strength, have the same dosage form, identical route of administration, and release the same amount of the brand-name drug. There is one difference: the generic drug is cheaper and can save money for the insurance companies and the patients. The FDA makes it clear that the cheaper generic drug is not inferior to the brandname drug.

Brand-name	Generic drug	Active ingredient	
Motrin	Equate Ibuprofen	Ibuprofen 200	
Tylenol	Equate Extra Strength	Acetaminophen 500 mg	

The Hatch-Waxman Act

In 1984, the Hatch-Waxman Act (also called the Drug Price Competition and Restoration Act) increased the speed of bringing a generic pharmaceutical on the marketplace. The goal was to attempt the financial interests of brand-name companies with those of the generic industry. Effects:

1. Before 1984, generic companies were required to prove the safety and efficacy of their products. But after 1984, a generic company had no longer to duplicate the testing requirements that had already performed by the brandname company.

2. It gave brand-name companies a patent extension that cannot exceed five years and it cannot allow the period between approval and patent expiration to exceed fourteen years. The average length of patent extension is three years.

3. It delayed generic competitions in other ways; e.g. drug companies have to wait five years after a new chemical entity drug is on the market.

After the Hatch-Waxman Act, other laws were made that allowed brand-name companies to a longer period of exclusivity; e.g. 1994, the Uruguay Round Agreements Act that extended the length of patent life for all inventions. After the Hatch-Waxman, the generic industry has grown very fast. Today generic drug account between forty-five and fifty percent of all prescriptions in the United States. It was natural for brand-name companies to find ways to protect their marketshare. A way to do that was to provide the big discounts to managed care companies so that the brand-name drug was included in the managed care company's formula. Sometimes the brand-name company goes to Congress and lobbies for a patent extension.







Different names, different shape, different prices? They have the same ingredients, but you can save a lot of money if you buy the generic drug.

Another way some drug companies try to discourage the use of generic drugs is by labeling some "critical care" drugs. Generic drugs cannot be substituted for the drugs on this list. This prevents consumers from paying the lower price for the generic equivalent of the drug.

Public needs to be informed

All parties concerned need to stay well informed about the strategies companies are using to prevent the use of generic drugs. The brand-name drug companies need to be made aware that these policies cannot be allowed because the public should buy the drugs at the lowest price.

Difference in Price

There is a difference in the price for a generic drug and a brand-name drug. The brand-name drug costs almost twice as much as the generic drug. Even though both have the same chemical and the same effect. The

difference in price could help the consumer to save money.

Differences in Price

Brand- name	Price	Generic drug	Price	Diffe- rence in
Motrin	S5.00	Equate Ibupro- fen	S2.50	About \$2.50
Tylenol	About \$4.00	Equate Extra Strength	About \$3.00	About \$1.00

The consumers pay enough money for their prescription drugs. Since the insurance companies and the brand-name companies get the money for their products, it is just fair for the consumers to buy the cheaper generic drug. The brand-name companies would not lose any money because of the Acts (laws) that were made.

Germany wrote this article as a Senior at L
C High School, Ky. Also a Basketball player, she wrote the article at the suggestion of her chemistry teacher, D

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